

## **Section 9**

describes the installation of accessories (assembly types).

Repair, maintenance and spare parts of accessories are implemented in the machine documentation or available as separate documentation.



## Section 9

### Accessories

#### List of Contents

#### 1 UPS (Uninterruptable Power Supply)

No.	Device	DD+DIS	Date of Issue
1.1	UPS Installation, Repair, Maintenance	DD+DIS032.00E	07 / 2000
1.2	UPS Service Contacts	DD+DIS357.00E	12 / 2000

#### 2 Additional Image Hard Disk (External Hard Disk)

No.	Device	DD+DIS	Date of Issue
2.1	Additional Image Hard Disk (External Hard Disk)	DD+DIS036.00E	07 / 2000

#### 3 Direct ID and Fast Preview Functions

No.	Device	DD+DIS	Date of Issue
3.1	Description of Direct ID and Fast Preview	DD+DIS081.01E	03 / 2001



## Section 9

### 1.1

### Installation, Repair and Maintenance of UPS

DD+DIS032.00E



Order-No.: DD+DIS032.00.E

July 2000



1 Piece T5MWN MA1

# **ADC System Components Accessories**

## **Section 9**

### **Installation, Repair and Maintenance of the UPS**

**(Uninterruptable Power Supply)****Types: Smart UPS 600 / 700**

#### **List of Contents**

<b>1</b>	<b>General Information.....</b>	<b>1</b>
<b>2</b>	<b>Features / Technical Data.....</b>	<b>1</b>
<b>3</b>	<b>Connection Diagrams.....</b>	<b>2</b>
3.1	Connection diagram of UPS to ULTRA 1 Processing Station.....	2
3.2	Connection diagram of UPS to ULTRA 10 Processing Station.....	3
<b>4</b>	<b>Operation.....</b>	<b>3</b>
<b>5</b>	<b>Scope of Delivery.....</b>	<b>4</b>
<b>6</b>	<b>Installation Procedure .....</b>	<b>4</b>
6.1	Hardware Connection .....	4
6.2	Software Installation.....	6
6.3	Performance Test .....	10
<b>7</b>	<b>Deactivation of UPS and PowerChute Software .....</b>	<b>11</b>
<b>8</b>	<b>Hardware-Problems UPS.....</b>	<b>14</b>
8.1	Warning Message.....	14
8.2	Reason .....	14
8.3	Solution.....	14
<b>9</b>	<b>Battery Replacement Procedure for UPS.....</b>	<b>17</b>
9.1	General.....	17
9.2	Battery Replacement Procedure for UPS AP 600 .....	18
9.3	Battery Replacement Procedure for UPS AP 700 .....	19





## 1 General Information



- This documentation describes the installation of an UPS (Uninterruptable Power Supply) for an already installed system.
- If the Processing Station is delivered included the UPS, the installation and activation is already done. The UPS just has to be connected.
- For the installation of the UPS the MIMOSA CD, which contains the Power Chute Software, is necessary. UPS can only be installed on the Processing Station.
- All targets (monitor, hard disk(s), DAT tape) connected to VIPS have to be connected to the UPS as well.



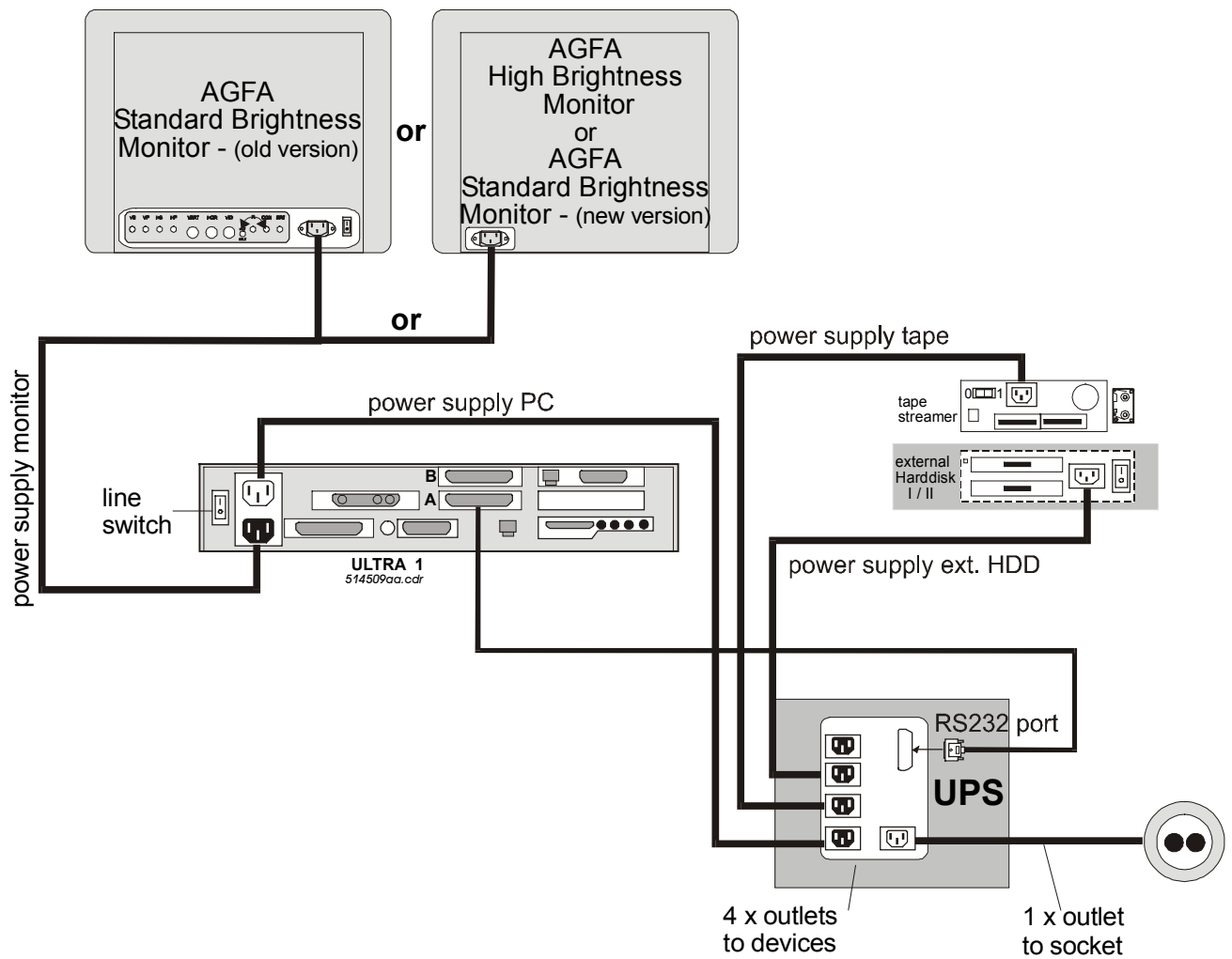
- If the UPS has to be disconnected in case of defect, a deactivation of the UPS Software is necessary as well (see point "7 Deactivation of UPS and PowerChute Software" page 11).  
**Otherwise booting problems may occur.**
- 

## 2 Features / Technical Data

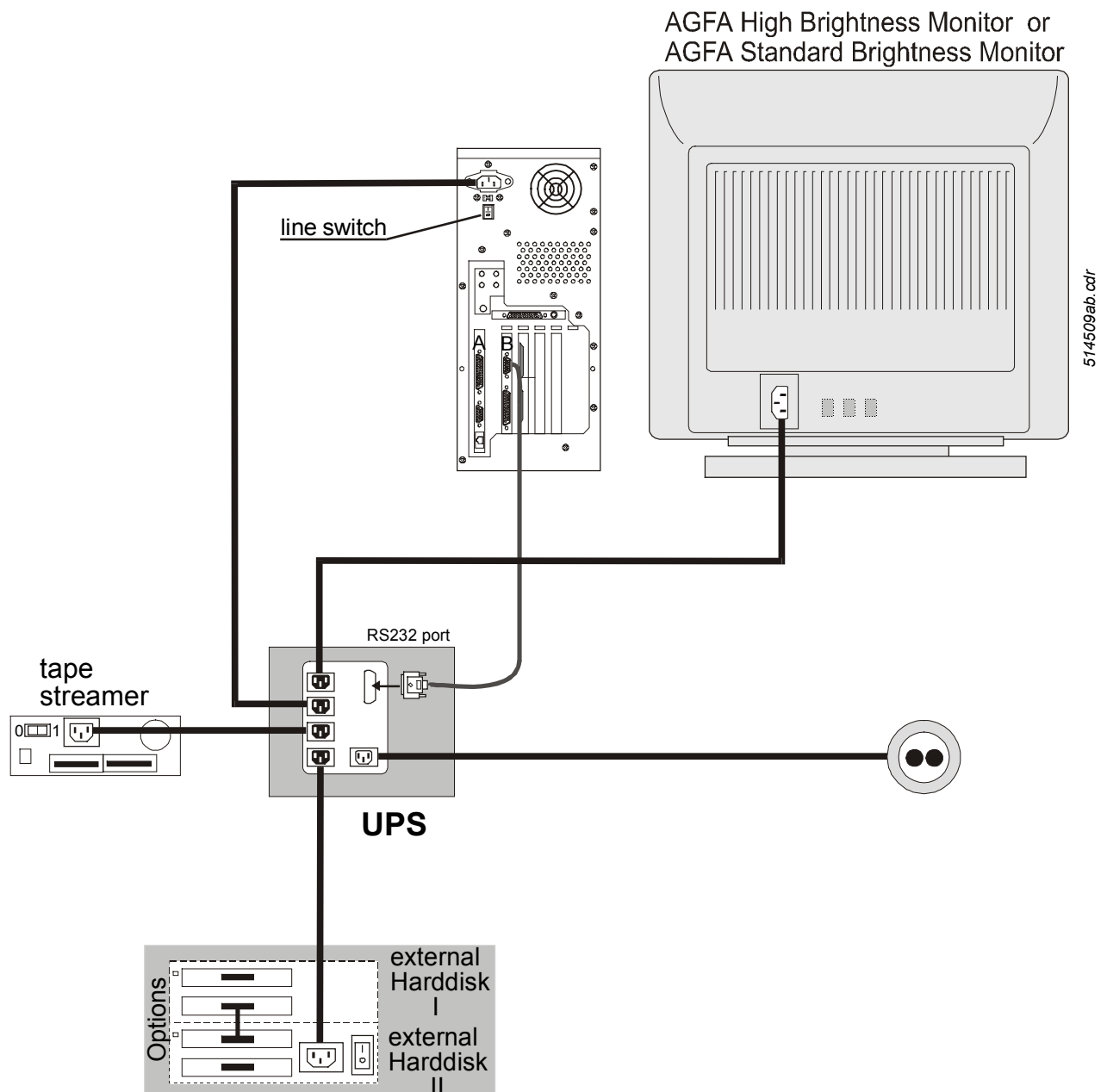
- The UPS performs a controlled shutdown within 5 minutes after a power failure or disconnection of mains.
- UPS beeps in case of power failure. Software causes warning message "*Power Failure*" (ID: G043)
- Recognizes automatically if power returns and stops shutdown procedure within 5 minutes (Warning Message "*Power is up again*", ID: G044) or automatically starts up / reboots Processing Station respectively
- Buffers short power interruptions
- **Hardware:**
  - Smart UPS 600 (APC American Power Conversion) 220-240V / 400W
  - Smart UPS 700 (APC American Power Conversion) 220-240V / 450W

### 3 Connection Diagrams

#### 3.1 Connection diagram of UPS to ULTRA 1 Processing Station



### 3.2 Connection diagram of UPS to ULTRA 10 Processing Station



## 4 Operation

For detailed information on the operation of UPS please refer to the corresponding user manual.

## 5 Scope of Delivery

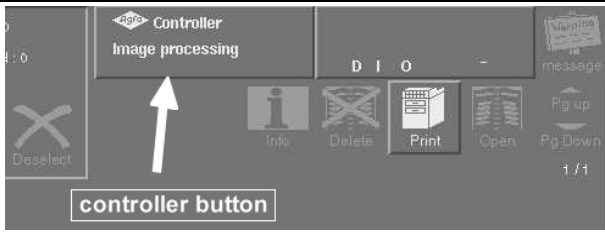
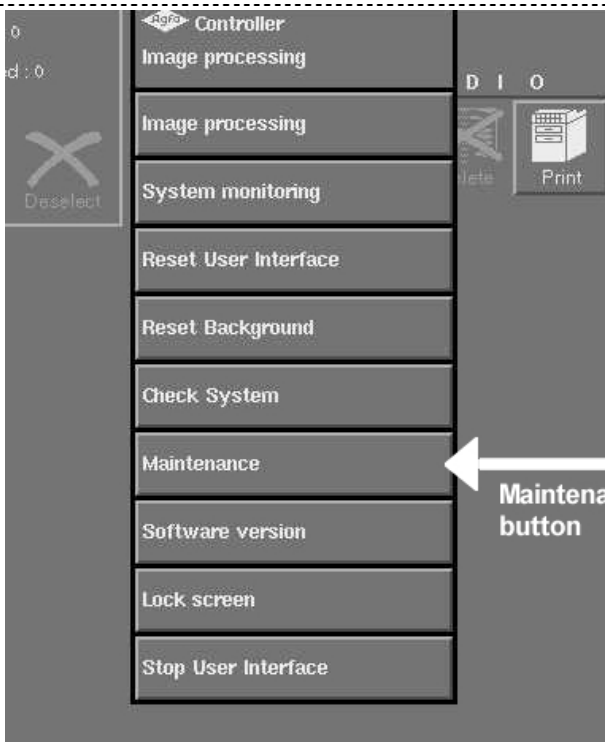
- 1 x UPS
- 1 x standard mains cable (female)
- 4 x standard mains cable (male)
- 2 x control cable
- 1 x CD-ROM with Software "Power Chute"
- Manuals for UPS and "Power Chute" Software

## 6 Installation Procedure



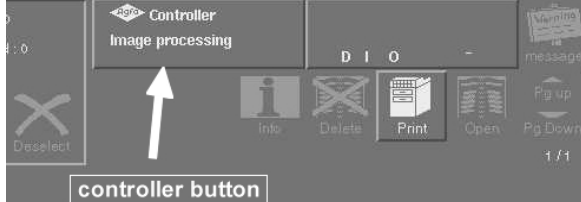
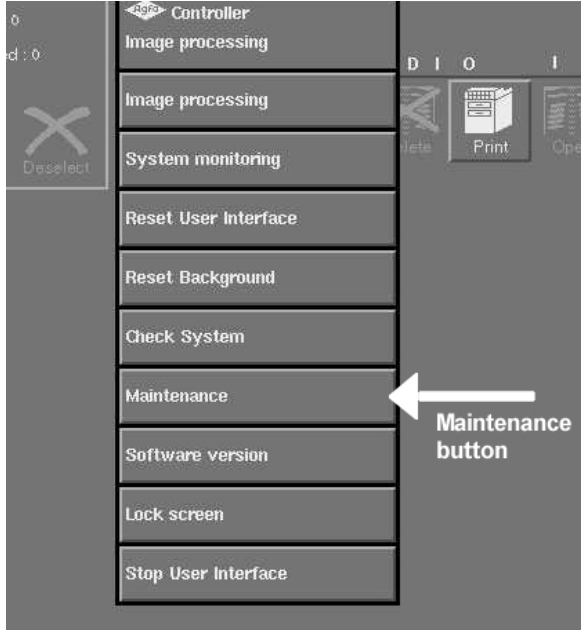
The following installation procedure is only valid for APC Smart UPS 600/700

### 6.1 Hardware Connection

No.	Procedure Steps	Display / Comment
1.		
2.	<ul style="list-style-type: none"> <li>Click &lt;Controller&gt;</li> </ul>	

No.	Procedure Steps	Display / Comment
3.	<ul style="list-style-type: none"> <li>Select &lt;Maintenance&gt; in the controller pull-down menu.</li> </ul>	Maintenance password > Maintenance Password ok. No match
4.	<ul style="list-style-type: none"> <li>Enter maintenance password and hit &lt;Return&gt;.</li> </ul>	1 Connect      Connect via Telnet to a network node 2 Install     Tools to setup DIPS/VIPS 3 Repair      Tools to repair DIPS/VIPS 4 Tools        UNIX Tools 5 Help        Documentation about (V)DIPS  Enter selection (/ / to exit) [?,??,q]:
5.	<ul style="list-style-type: none"> <li>Select:                2 install and hit                                        &lt;Return&gt;                3 Hardware and hit                                        &lt;Return&gt;                2 PowerChute and hit                                        &lt;Return&gt;                1 Connect and hit                                        &lt;Return&gt;             </li> </ul>	OK to shut down the system
6.	<ul style="list-style-type: none"> <li>type y</li> </ul>	the system shuts down
7.	<ul style="list-style-type: none"> <li>When the System is down: switch off the Processing Station and all peripherals with their main switches.</li> </ul>	
8.	<ul style="list-style-type: none"> <li>Connect the power cable of the Processing Station to the mains input of the UPS.</li> </ul>	see connection diagram, item 3.
9.	<ul style="list-style-type: none"> <li>Use supplied cables to connect Processing Station, monitor, external hard disks and DAT tape to the UPS main outlets.</li> </ul>	see connection diagram, item 3.
10.	<ul style="list-style-type: none"> <li>Use supplied black serial cable to connect UPS with serial port B of the Processing Station.</li> </ul>	

## 6.2 Software Installation

No.	Procedure Steps	Display / Comment
1.	<ul style="list-style-type: none"> <li>Switch on first all peripherals and then the Processing Station with their own main switch.</li> </ul>	
2.	<ul style="list-style-type: none"> <li>Switch on UPS with the main switch               <ul style="list-style-type: none"> <li>- at the back side (UPS 600)</li> <li>- at the front side (UPS 700).</li> </ul> </li> </ul>	
3.	<ul style="list-style-type: none"> <li>Push "I" button on the front panel of the UPS to start up the Processing Station and all peripherals. Switch on the monitor.</li> </ul>	The Processing Station boots and login prompt appears.
4.	<ul style="list-style-type: none"> <li>Login!</li> </ul>	
5.	<ul style="list-style-type: none"> <li>Click &lt;Controller&gt;</li> </ul>	
6.	<ul style="list-style-type: none"> <li>Select &lt;Maintenance&gt; in the controller pull-down menu.</li> </ul>	Maintenance password > Maintenance Password ok. No match

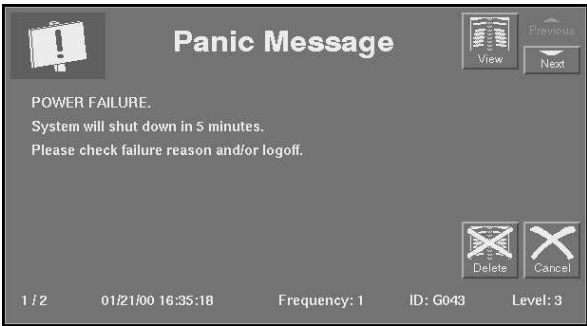
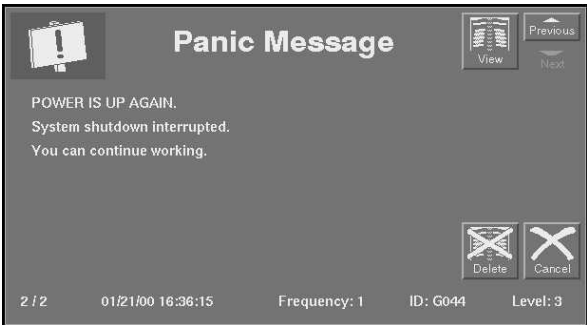
No	Procedure Steps	Display / Comment
7.	<ul style="list-style-type: none"> <li>enter maintenance password and hit &lt;Return&gt;.</li> </ul>	1 Connect      Connect via Telnet to a network node 2 Install      Tools to setup DIPS/VIPS 3 Repair      Tools to repair DIPS/VIPS 4 Tools        UNIX Tools 5 Help         Documentation about (V)DIPS  Enter selection (// to exit) [?,??,q]:
8.	<ul style="list-style-type: none"> <li>Select:                2 install and hit                                        &lt;Return&gt;                3 Hardware and hit                                        &lt;Return&gt;                2 PowerChute and hit                                        &lt;Return&gt;                2 Install and hit                                        &lt;Return&gt;</li> </ul>	The following line appears:  Put the CD into the CD player and hit return:
9.	<ul style="list-style-type: none"> <li>Insert MIMOSA CD into CD ROM-drive.</li> </ul>	Wait until the file manager window appears: File Manager
10.	<ul style="list-style-type: none"> <li>Click on &lt;File&gt; and then &lt;Close&gt; in the file manager window.</li> </ul>	Put the CD into the CD player and hit return:
11.	<ul style="list-style-type: none"> <li>Hit &lt;Return&gt;.</li> </ul>	Select the media type from which you will install: [?]
12.	<ul style="list-style-type: none"> <li>Type                1 CD-ROM and hit &lt;Return&gt;.</li> </ul>	Enter path to mounted CD ROM [/cdrom/unnamed_cdrom/SO/powerchute]:
13.	<ul style="list-style-type: none"> <li>Hit &lt;Return&gt;.</li> </ul>	Would you like to see an overview of the Installation? [y/n,q]
14.	<ul style="list-style-type: none"> <li>Type n and hit &lt;Return&gt;.</li> </ul>	Which Parts of PowerChute Plus for Unix do you wish to install?
15.	<ul style="list-style-type: none"> <li>Type                3 Both the User Interface and Daemon Modules and hit &lt;Return&gt;.</li> </ul>	Which APC Hardware will PowerChute Plus for Unix be running with
16.	<ul style="list-style-type: none"> <li>Type                2 Smart-UPS and hit &lt;Return&gt;.</li> </ul>	Do you currently have a MeasureUps attached to the UPS? [y/n,q]
17.	<ul style="list-style-type: none"> <li>Type n and hit &lt;Return&gt;.</li> </ul>	On which Operating System are you installing? [?]

No	Procedure Steps	Display / Comment
18.	<ul style="list-style-type: none"> <li>Type 1 Solaris 2.X for Sparc and hit &lt;Return&gt;.</li> </ul>	Do you currently have TCP/IP installed?
19.	<ul style="list-style-type: none"> <li>Type n</li> </ul>	Which color scheme do you wish to use [1]?
20.	<ul style="list-style-type: none"> <li>Type 2 Use Monochrome Color scheme and hit &lt;Return&gt;.</li> </ul>	Which serial device will be dedicated to PowerChute Plus for Unix
21.	<ul style="list-style-type: none"> <li>Type 2 to select &lt;/dev/ttyb&gt; and hit &lt;Return&gt; (if UPS is connected to port B)</li> </ul>	<p>-----</p> <p>--</p> <p>You should have the black cable, #940-0024C attached to /dev/ttyb or /dev/ttya respectively. <b>Please verify.</b></p> <p>-----</p> <p>--</p>
22.	<ul style="list-style-type: none"> <li>Verify the cable connection.</li> </ul>	Where do you wish to install PowerChute Plus for Unix? [/usr/lib/powerchute]
23.	<ul style="list-style-type: none"> <li>Hit &lt;Return&gt;.</li> </ul>	<p>-----</p> <p>-</p> <p>PRODUCT: PowerChute Plus for Unix INSTALL USER INTERFACE: TRUE INSTALL DAEMON : TRUE OPERATING SYSTEM: Solaris 2.X for Sparc INSTALL PATH: /usr/lib/powerchute PATH TO MOUNTED CD ROM: e.g. /cdrom/powerchute DEDICATED TTY: /dev/ttyb (or /dev/ttya) UPS TYPE : SMART UPS MeasureUPS INSTALLED : FALSE PREVIOUS VERSION FOUND : FALSE INSTALLING AS ROOT : TRUE TCP/IP Installed : FALSE</p> <p>-----</p> <p>-</p> <p>Are the above selections correct?</p>
24.	<ul style="list-style-type: none"> <li>Type y and hit &lt;Return&gt;.</li> </ul>	<p>copying files</p> <p>After a while the line new password appears</p>
25.	<ul style="list-style-type: none"> <li>Enter the same password as used for the maintenance menu.</li> </ul>	Re-enter new password
26.	<ul style="list-style-type: none"> <li>Confirm the password.</li> </ul>	OK to reboot the system :
27.	<ul style="list-style-type: none"> <li>Type y</li> </ul>	The system reboots



No	Procedure Steps	Display / Comment
28.	<ul style="list-style-type: none"> <li>When the Processing Station has been shut down, switch it on again with the &lt;on-off key&gt; of the keyboard.</li> </ul>	The Processing Station boots and login prompt appears.
29.	<ul style="list-style-type: none"> <li>Login!</li> </ul>	The UI starts
30.	<ul style="list-style-type: none"> <li>Click &lt;Controller&gt;.</li> </ul>	
31.	<ul style="list-style-type: none"> <li>Select &lt;Maintenance&gt; in the controller pull-down menu.</li> </ul>	Maintenance password > Maintenance Password ok. No match
32.	<ul style="list-style-type: none"> <li>Enter maintenance password and hit &lt;Return&gt;.</li> </ul>	1 Connect      Connect via Telnet to a network node 2 Install      Tools to setup DIPS/VIPS 3 Repair      Tools to repair DIPS/VIPS 4 Tools      UNIX Tools 5 Help      Documentation about (V)DIPS  Enter selection (// to exit) [?,??,q]:
33.	<ul style="list-style-type: none"> <li>Select:  2 install and hit &lt;Return&gt;  3 Hardware and hit &lt;Return&gt;  2 PowerChute and hit &lt;Return&gt;.</li> </ul>	
34.	<ul style="list-style-type: none"> <li>Check that the SW is initialized and activated in that the following two lines are displayed with "YES"  PowerChute software initialized: <b>YES</b>  PowerChute software is running: <b>YES</b></li> </ul>	Exit the menu
35.	<ul style="list-style-type: none"> <li>Type q (three times)</li> </ul>	Enter selection:
36.	<ul style="list-style-type: none"> <li>Type  4 Tools and hit &lt;Return&gt;  9 CDROM Eject and hit &lt;Return&gt;.</li> </ul>	CD-Rom is ejected
37.	<ul style="list-style-type: none"> <li>Remove the CD ROM</li> </ul>	
38.	<ul style="list-style-type: none"> <li>Type q to exit &lt;Maintenance menu&gt;</li> </ul>	The UI starts. Installation done.

## 6.3 Performance Test

No	Procedure Steps	Display / Comment
1.	<ul style="list-style-type: none"> <li>Unplug the mains cable leading to the wall socket</li> </ul>	<p>The following Panic Message should appear:</p> 
2.	<ul style="list-style-type: none"> <li>Connect the mains cable again</li> </ul>	<p>The following Panic Message should appear:</p> 



Instruct the local user about the operation of the UPS.

## 7 Deactivation of UPS and PowerChute Software

When do you have to deactivate the UPS?

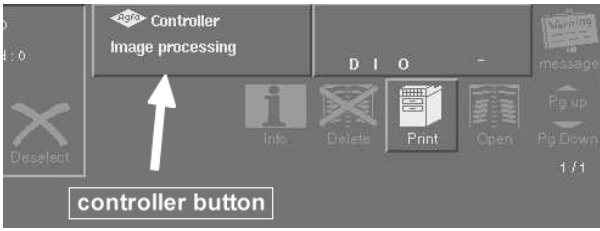
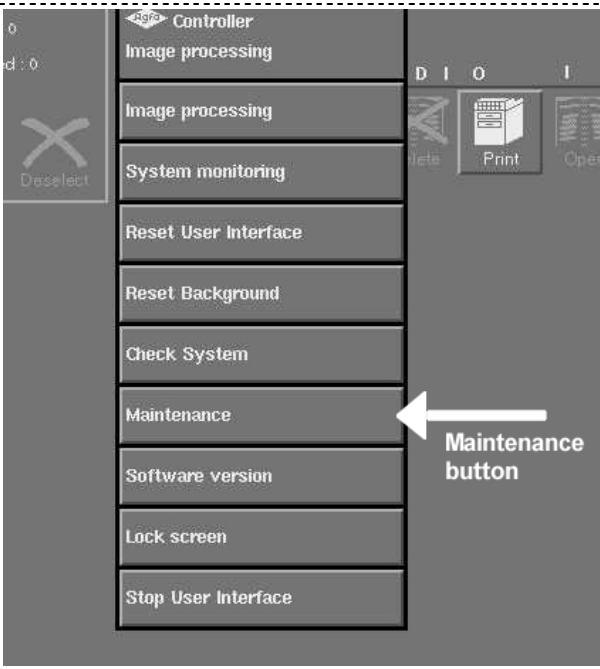


- if UPS is defective
- if Battery is defective or flat

**If the UPS has to be disconnected in case of defect, a deactivation of the UPS Software is necessary as well. Otherwise booting problems may occur.**



If the UPS has to be connected again, only **<ActivatePowerChute>** has to be done!

No.	Procedure Steps	Display / Comment
1.		
2.	<ul style="list-style-type: none"> <li>• Click <b>&lt;Controller&gt;</b></li> </ul>	
3.	<ul style="list-style-type: none"> <li>• Select <b>&lt;Maintenance&gt;</b> in the controller pull-down menu.</li> </ul>	<p>Maintenance password &gt; Maintenance Password ok. No match</p>

No.	Procedure Steps	Display / Comment
4.	<ul style="list-style-type: none"> <li>Enter maintenance password and hit <b>&lt;Return&gt;</b>.</li> </ul>	1 Connect      Connect via Telnet to a network node 2 Install      Tools to setup DIPS/VIPS 3 Repair      Tools to repair DIPS/VIPS 4 Tools      UNIX Tools 5 Help      Documentation about (V)DIPS  Enter selection (// to exit) [?,??,q]:
5.	<ul style="list-style-type: none"> <li>Select:               <ul style="list-style-type: none"> <li>2 install and hit <b>&lt;Return&gt;</b></li> <li>3 Hardware and hit <b>&lt;Return&gt;</b></li> <li>2 PowerChute and hit <b>&lt;Return&gt;</b></li> <li>4 deactivate and hit <b>&lt;Return&gt;</b></li> </ul> </li> </ul>	OK to shut down the system
6.	<ul style="list-style-type: none"> <li>Type y</li> </ul>	The shut down starts.
7.	<ul style="list-style-type: none"> <li>When the PS has shut down, turn off UPS with UPS ENABLE SWITCH on the rear. Switch off Processing Station and peripherals with their main switches.</li> </ul>	
8.	<ul style="list-style-type: none"> <li>Move power cord from the main input of the UPS to the Processing Station.</li> </ul>	
9.	<ul style="list-style-type: none"> <li>Connect the other peripherals from UPS to the mains.</li> </ul>	
10.	<ul style="list-style-type: none"> <li>Disconnect black serial cable from the serial port B of the Processing Station.</li> </ul>	
11.	<ul style="list-style-type: none"> <li>Switch on all components with their main switches.</li> </ul>	The Processing Station boots and login prompt appears.
12.	<ul style="list-style-type: none"> <li>login!</li> </ul>	The UI starts
13.	<ul style="list-style-type: none"> <li>Click <b>&lt;Controller&gt;</b></li> </ul>	
14.	<ul style="list-style-type: none"> <li>Select <b>&lt;Maintenance&gt;</b> in the controller pull-down menu.</li> </ul>	Maintenance password > Maintenance Password ok. No match

No.	Procedure Steps	Display / Comment
15.	<ul style="list-style-type: none"> <li>enter maintenance password and hit <b>&lt;Return&gt;</b></li> </ul>	<pre> 1 Connect    Connect via Telnet to a               network node 2 Install    Tools to setup DIPS/VIPS 3 Repair     Tools to repair DIPS/VIPS 4 Tools      UNIX Tools 5 Help       Documentation about               (V)DIPS  Enter selection (// to exit) [?,??,q]: </pre>
16.	<ul style="list-style-type: none"> <li>select:               <ul style="list-style-type: none"> <li>2 install and hit <b>&lt;Return&gt;</b></li> <li>3 Hardware and hit <b>&lt;Return&gt;</b></li> <li>2 PowerChute and hit <b>&lt;Return&gt;</b></li> </ul> </li> </ul>	
17.	<ul style="list-style-type: none"> <li>Check that the Software is reinitialized and deactivated in that the following two lines are displayed with "NO"                PowerChute software initialized : <b>NO</b>                PowerChute software is running: <b>NO</b></li> </ul>	
18.	<ul style="list-style-type: none"> <li>type <b>q</b> (4 times) to exit <b>&lt;Maintenance menu&gt;</b>.</li> </ul>	
19.	<ul style="list-style-type: none"> <li>Hit <b>&lt;Return&gt;</b>.</li> </ul>	UI starts. Deactivation done.

## 8 Hardware-Problems UPS

### 8.1 Warning Message

"Power Failure" and UPS beeps

### 8.2 Reason

- Disconnection from the mains
- UPS or Battery is defective

### 8.3 Solution

- check all cables or connectors
- replace the UPS or the battery



Before disconnecting the UPS, a deactivation of the UPS software has to be executed.

---


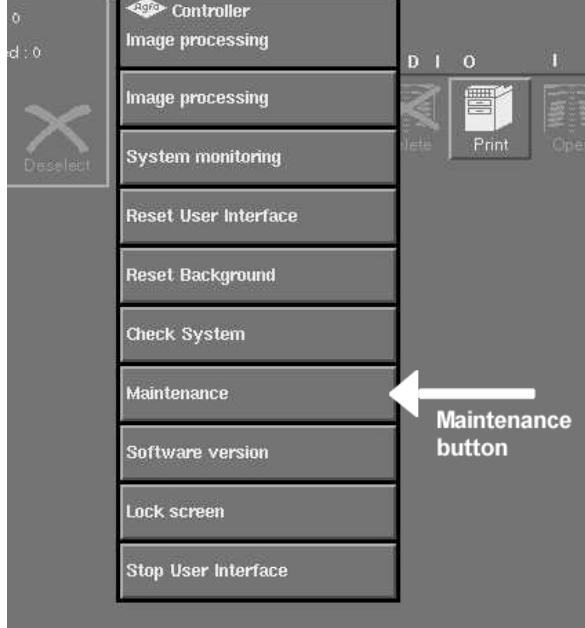
#### 8.3.1 Deactivation of the UPS-Software

For the deactivation of the UPS software see item 7 of this section.

### 8.3.2 Reactivation of the UPS-Software

After replacement of the UPS or the battery a reactivation of the UPS software is necessary:

- connect Processing Station, monitor, external harddisks and DAT tape to the UPS main outlets
- connect the mains input to the UPS
- connect serial black cable to connect UPS with serial port B (A) of the Processing Station.

No.	Procedure Steps	Display / Comment
1.	<ul style="list-style-type: none"> <li>• Switch on first all peripherals and then the Processing Station with their own main switch.</li> </ul>	
2.	<ul style="list-style-type: none"> <li>• Switch on UPS with the main switch - at the back side (UPS 600) - at the front side (UPS 700).</li> </ul>	
3.	<ul style="list-style-type: none"> <li>• Push "I" button on the front panel of the UPS to start up the Processing Station and all peripherals. Switch on the monitor.</li> </ul>	The Processing Station boots and login prompt appears.
4.	<ul style="list-style-type: none"> <li>• login!</li> </ul>	
5.	<ul style="list-style-type: none"> <li>• Click &lt;Controller&gt;.</li> </ul>	
6.	<ul style="list-style-type: none"> <li>• Select &lt;Maintenance&gt; in the controller pull-down menu.</li> </ul>	<p>Maintenance password &gt; Maintenance Password ok. No match</p>

No.	Procedure Steps	Display / Comment
7.	<ul style="list-style-type: none"> <li>Enter maintenance password and hit <b>&lt;Return&gt;</b>.</li> </ul>	1 Connect      Connect via Telnet to a network node 2 Install      Tools to setup DIPS/VIPS 3 Repair      Tools to repair DIPS/VIPS 4 Tools        UNIX Tools 5 Help        Documentation about (V)DIPS  Enter selection (// to exit) [?,??,q]:
8.	<ul style="list-style-type: none"> <li>Select:                2 install and hit <b>&lt;Return&gt;</b>                3 Hardware and hit <b>&lt;Return&gt;</b>                2 PowerChute and hit <b>&lt;Return&gt;</b>                3 Activate and hit <b>&lt;Return&gt;</b>.             </li> </ul>	
9.	<ul style="list-style-type: none"> <li>type q (4 times) to exit <b>&lt;Maintenance menu&gt;</b>.</li> </ul>	
10.	<ul style="list-style-type: none"> <li>Hit <b>&lt;Return&gt;</b>.</li> </ul>	UI starts. Deactivation done.



## 9 Battery Replacement Procedure for UPS

### 9.1 General

- The UPS gives a warning that the batteries have to be exchanged.
- Both, AP600 and AP700, have the same batteries inside:

<b>Battery</b>	12V – 7.2Ah rechargeable sealed lead.acid battery (2x)
<b>Total dimensions</b> (W x H x L)	13 x 10 x 15 (cm)
<b>Total weight</b>	5 (kg)

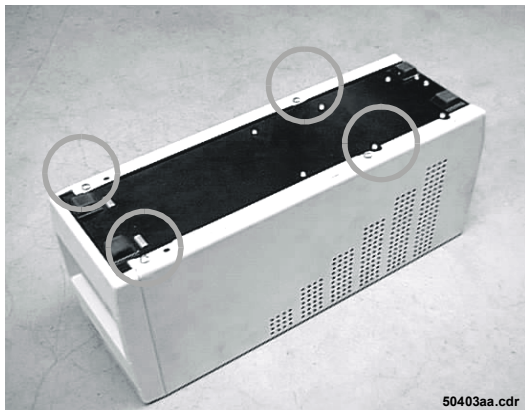


**UPS AP600**

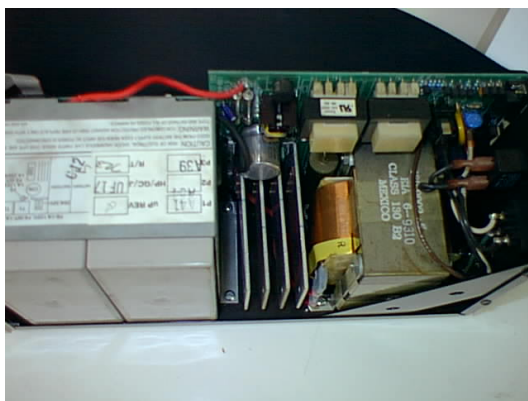


**UPS AP700**

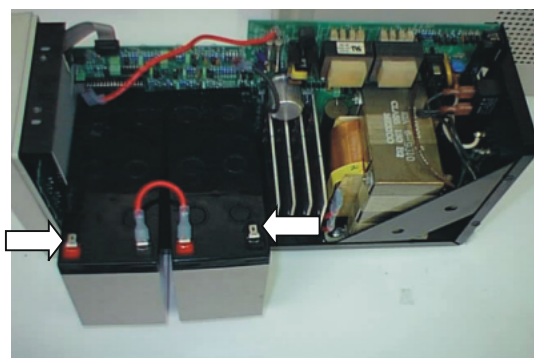
## 9.2 Battery Replacement Procedure for UPS AP 600



- Remove the metal cover by loosening the 4 screws on the bottom of the UPS (see circles). Pull the cover backwards to remove.



- Remove the metal plate that holds the batteries.  
**Do not touch the exposed printed circuit board!**
- Loosen 5 screws, 2 on top, 2 at the bottom and 1 that is fixed through the circuitboard on the back of the metal plate.  
Therefore remove the plastic plate that is protecting the back of the circuitboard



- Disconnect the two battery leads (white arrows) and remove the batteries.
  - Insert the new batteries and connect the battery leads (red wire + , black wire - ).
  - Re-assemble the UPS in reverse order as described before
- 
- Dispose the old batteries properly at an appropriate recycling facility or return it to the supplier in the packing material of the new battery .

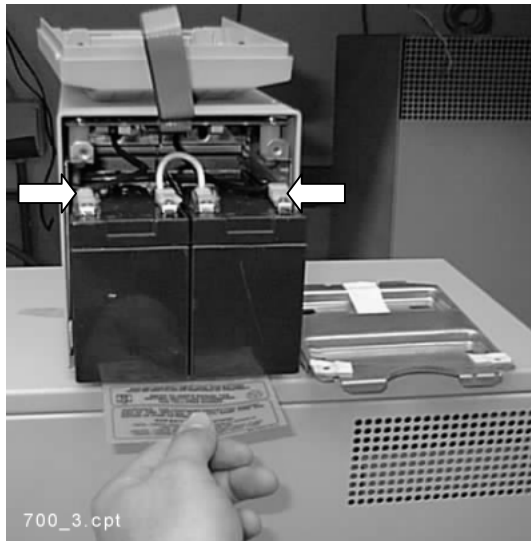
### 9.3 Battery Replacement Procedure for UPS AP 700



- pull away the front cover (no tools needed).



- loosen two screws of the battery housing (white circles) with a Phillips screwdriver.



- take the two batteries out of the housing by pulling at the tab (see hand).
- disconnect the two battery leads (white arrows).
- insert the new batteries and connect the battery leads (red wire + , black wire - ).
- re-assemble the UPS in reverse order as described before.

- Dispose the old batteries properly at an appropriate recycling facility or return it to the supplier in the packing material of the new battery .

(divider)

## Section 9

### 1.2

#### UPS Service Contacts

DD+DIS357.00E



Order-No.: DD+DIS357.00E

December 2000



1 Piece UHAEF MA1

**ADC System Components  
Accessories****UPS Service**

In case of a defective UPS you can directly call **PK Electronics** Belgium :

**Tel: 32 16 609468****1. UPS within warranty period**

PKE will do the necessary calls to Ireland in order to replace the defective UPS immediately free of any charge (transport costs).

**2. UPS out of warranty period**

PKE can repair most UPS's within two days. Price includes also transport costs (variable).

Alternatively, you can contact **APC** Service with the addresses/numbers listed below.

In case of an UPS out of warranty it may be cheaper to call the nearest service centre and send the UPS there instead of sending it to Belgium.

p.t.o



Country	Address
<b>APC Argentina</b>	<p>Alsina 1433 6° Piso Capital Federal Buenos Aires ARGENTINA 1088</p> <p><b>Technical Support</b> 0 (800) 666 2722 + 54 (11) 4383 9408 (Fax No.)</p>
<b>APC Australia</b>	<p>Level 27, 100 Miller St. Northpoint North Sydney Sydney AUSTRALIA NSW 2060</p> <p><b>Technical Support</b> (1800) 652 725 + 61 (2) 9955 2844 (Fax No.)</p>
<b>APC AUSTRIA</b>	<p><b>Technical Support</b> 0(800) 296 480</p>
<b>APC Brasil</b>	<p>APC Brasil Al. Ministro Rocha Azevedo, 456 - 8.Andar Cerqueira Cesar São Paulo SP BRAZIL 01410-000</p> <p><b>Technical Support</b> 0800-555-272 + (0xx11) 3061-3722 (Fax No.)</p>
<b>APC Czech &amp; Slovak Republic</b>	<p>Za pruhy 243/2 Praha 4 CESKA REPUBLIKA 142 00</p> <p><b>Technical Support</b> 0(800) 102 063 + 420 (2) 4144 2405 (Fax No.)</p>



Country	Address
<b>APC Chile</b>	Parque Oriente 4400 Penalolen Santiago CHILE  <i>Technical Support</i> + 56 (2) 322 0204 (Fax No.)
<b>APC China</b>	Rm. 401, North Building, Kerry Centre 1 Guang Hua Road Chao Yang District Chao Yang District Beijing P.R. of CHINA 100020  <i>Technical Support</i> 86 800 810 0160 + 86 (10) 8529 9158 (Fax No.)
<b>APC Colombia</b>	Local Office  Calle 84 No. 7-59 Of 302 Bogotá COLOMBIA  <i>Technical Support</i> (980) 153 947 + 57 (1) 347 3438 (Fax No.)
<b>APC Denmark ApS (Finland &amp; Iceland)</b>	Silcon Alle DK-6000 Kolding DANMARK  <i>Technical Support</i> (800) 18 153 + 45 70 27 01 59 (Fax No.)
<b>APC MUC Deutschland GmbH</b>	Mittererstr. 9 Munich DEUTSCHLAND 80336  <i>Technical Support</i> 0(800) 180 12 27 + 49 (89) 51417 100 (Fax No.)

Country	Address
<b>APC Spain - Madrid</b>	<p>Jacometrezo, 15 oficina 5-N Madrid ESPANA 28013</p> <p><b>Technical Support</b> (900) 95 35 33 + 34 (91) 7589975 (Fax No.)</p>
<b>APC Finland</b>	<p>PL 69 02 201 Espoo FINLAND</p> <p><b>Technical Support</b> 9800 13374 + 358 9 502 1330 (Fax No.)</p>
<b>APC France SARL</b>	<p>143 bis avenue de Verdun Issy-les-Moulineaux Cedex FRANCE 92442</p> <p><b>Technical Support</b> 0800 90 64 83 + 33 (1) 41 90 52 80 (Fax No.)</p>
<b>APC Greece</b>	<p>P.O Box 67278 Melissia GREECE GR-15102</p> <p><b>Technical Support</b> 0080035312206 + (30) 1 80 37 255 (Fax)</p>
<b>Hong Kong</b>	<p>Room 903, 9F., Mass Mutual Tower 38 Gloucester Road Wanchai HONG KONG</p> <p><b>Technical Support</b> (852) 2834 5001 + (852) 2834 8876 (Fax No.)</p>
<b>APC Indonesia</b>	<p>Jl. Taman Sunter Indah Blok KI-1 No 34 Jakarta INDONESIA 14350</p> <p><b>Technical Support</b> 62 (21) 650 0813 + 62 (21) 650 7427 (Fax No.)</p>

Country	Address
<b>APC Dublin Ltd</b>	<p>Clonshaugh Industrial Estate Clonshaugh Dublin 17 IRELAND</p> <p><b>Technical Support</b> 1 (800) 702 000 Extension 2045 + 353 (1) 848 6040 (<b>Fax No.</b>)</p>
<b>APC Israel</b>	<p>Local Office</p> <p>ISRAEL</p> <p><b>Technical Support</b> 1(800)945 2206</p>
<b>APC Italy</b>	<p>Via Grosio 10/8 Milano ITALIA 20151</p> <p><b>Technical Support</b> (800) 874 731 + 39 (02) 30 88 038 (<b>Fax No.</b>)</p>
<b>APC Korea</b>	<p>RM #402, CheongWon Bldg., 828-5 Yuksam Dong, Kangnam Ku Seoul SOUTH KOREA 135-080</p> <p><b>Technical Support</b> 82 (2) 501 6492 + 82 (2) 501 6369 (<b>Fax No.</b>)</p>
<b>APC Hungary</b>	<p>Könyves György u. 5. II. 3. Budapest MAGYARORSZAG 1114</p> <p><b>Technical Support</b> 06(800) 12221 + 36 (1) 209 4677 (<b>Fax No.</b>)</p>
<b>Malaysia</b>	<p>Unit 6.02, 6th Floor, Wisma Integrated Persiaran Kewajipan USJ1 UEP Subang Jaya Selangor MALAYSIA 47600</p> <p><b>Technical Support</b> (603) 8023 4272 + (603) 8023 3272 (<b>Fax No.</b>)</p>

Country	Address
<b>APC Mexico</b>	<p>Local Office</p> <p>Av. Ejército Nacional #579 Décimo piso Col. Granada D.F. MEXICO 11520</p> <p><b>Technical Support</b> 001-800-804-4283 + (52) 5203-26-99 (Fax No.)</p>
<b>New Zealand</b>	<p>Level 6 90 Symonds Street Auckland NEW ZEALAND</p> <p><b>Technical Support</b> (61) (02) 9955 9366</p>
<b>APC Norway</b>	<p>Pb 3175 Elisenberg 0208 OSLO NORWAY</p> <p><b>Technical Support</b> (800) 11 632 + 47 2255 8079 (Fax No)</p>
<b>Philippines</b>	<p>Unit 2502, The Orient Square Condominium Emerald Ave., Ortigas Center Pasig City PHILIPPINES</p> <p><b>Technical Support</b> (632) 637-5457 + (632)637-5580 (Fax No.)</p>
<b>APC Baltics</b>	<p>APC Biuro Informacji Technicznej ul. Powstancow Slaskich 44 Warszawa POLSKA 01-381</p> <p><b>Technical Support</b> 00 800 353 1202 + 48 (22) 666 00 22 (Fax No.)</p>
<b>APC Portugal</b>	<p>Estrada de paco d'arcos 48 Oeiras PORTUGAL P-2780</p> <p><b>Technical Support</b> (800) 85 31 82 + 351 (21) 44 11 812 (Fax No.)</p>

Country	Address
<b>APC Russia - Moscow</b>	8, 2-nd Roschinsky Proezd, build. 4, 2nd floor Moscow ROSSIYA 117419  <b>Technical Support</b> 7 (095) 916 71 66 + 7 (095) 929 91 80 (Fax No.)
<b>APC Russia - Novosibirsk</b>	6, Prospect Lavrentieva, office 433 Novosibirsk ROSSIYA 630090  <b>Technical Support</b> 7 (095) 916 71 66 + 7 (3832) 39 75 75 (Fax No.)
<b>APC Russia - St-Petersburg</b>	P.O. Box 1000 Sankt-Peterburg ROSSIYA 193232  <b>Technical Support</b> 7 (095) 916 71 66 + 7 (812) 967 67 99 (Fax No.)
<b>APC Singapore</b>	100 Beach Road #13-08 Shaw Towers Singapore SINGAPORE 189702  <b>Technical Support</b> (65) 398 1000 + (65) 398 1010 (Fax No.)
<b>APC South and Central Africa</b>	Local Office  Unit 201, First Floor, Sheldon Place 5 Lonehill Close Lonehill Johannesburg SOUTH AFRICA 2062  <b>Technical Support</b> 0 (800) 994 206 + 27 (11) 465 4604 (Fax No.)
<b>APC Sweden AB</b>	Box 20195 Mariehällsvägen 44 SE-161 02 BROMMA SVERIGE  <b>Technical Support</b> (020) 79 54 19 + 46 (8) 28 33 53 (Fax No.)

Country	Address
<b>APC Switzerland</b>	<p>Local Office</p> <p>Mittererstr. 9 80336 Muenchen Muenchen SWITZERLAND</p> <p><b>Technical Support</b> 0(800)55 61 77 + 0049 89 51417-100 (Fax No.)</p>
<b>APC Thailand</b>	<p>Room no. 1413 , 14 flr., Q-House Asoke 66 Sukhumvit 21 (Asoke) Road Klongtoey Bangkok THAILAND 10110</p> <p><b>Technical Support</b> (662) 264 2885 + 66 (2) 264 2884 (Fax No.)</p>
<b>APC Turkey</b>	<p>Barbaros Bulvari Pinar Apt. No:135 D:10 Kat:5 Balmumcu - Istanbul TURKIYE</p> <p><b>Technical Support</b> 0(800)353 90 275 + 90 (212) 266 6090 (Fax No.)</p>
<b>APC Ukraine</b>	<p>34, Boulevard Lesi Ukrainki Institute "Ukrneftemashproject", office 25-4 Kiev UKRAYINA 252133</p> <p><b>Technical Support</b> 353 (91) 702 020 + 380 (44) 295 50 31 (Fax No.)</p>
<b>APC United Arab Emirates</b>	<p>P.O.Box 53852 Dubai UNITED ARAB EMIRATES</p> <p><b>Technical Support</b> 353 (91) 702 020 + 971 (4) 3435 330 (Fax No.)</p>
<b>American Power Conversion UK Limited</b>	<p>Local Office</p> <p>The Aeolian, 4 <b>Mondial</b> Way Hayes Middlesex UNITED KINGDOM UB35AR</p> <p><b>Technical Support</b> (0800)13 29 90 option 2 + 44 (0) 20 8990 6440 (Fax No.)</p>

Country	Address
APC Venezuela	<p>Calle La Escuela (Ricoa), Qta. Los Cascarrabias La Trinidad Caracas VENEZUELA 1080</p> <p><b>Technical Support</b> (800) 128 56 + 58 (2) 239 1539 (Fax No.)</p> <p>Japan</p> <p>Phone +81 3 5434 2021 Fax +81 3 5434 2022 Email apcjcs@gol.com</p> <p>USA</p> <p>Phone +800 800 4272 Fax +401 788 2743 Email e-Support</p>





## Section 9

### 2.1

#### Additional Image Hard Disk

DD+DIS036.00E



Order No: DD+DIS036.00E

July 2000



1 Piece QJ6LQ Ma1

# ADC System Components Accessories

## Fitting Instructions

### Additional Image Hard Disk(s) for ULTRA SPARC 1 / ULTRA SPARC 10

#### List of Contents

1.	General Information .....	1
2.	Installation Procedure .....	2
3.	De-Installation of a Hard Disk .....	7

#### 1. General Information

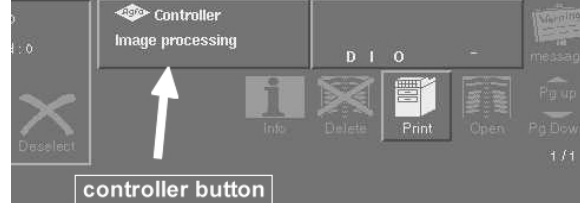
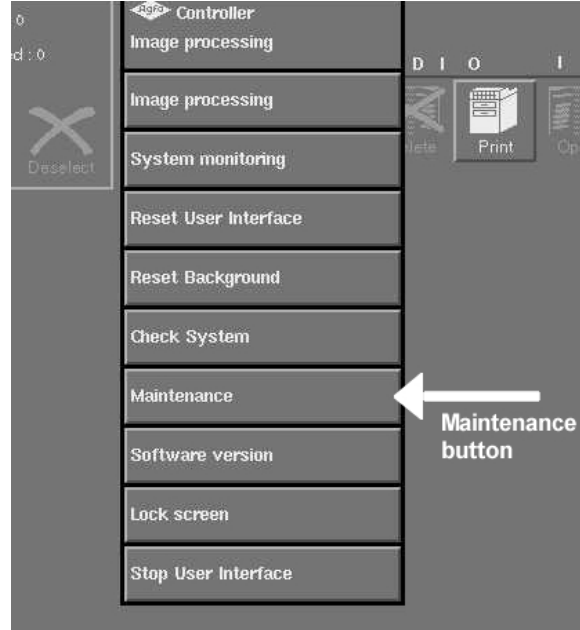


- This documentation describes the installation of additional hard disk(s) for an already installed system, based on:
  - Processing Station Software **DIPS1.0.03 with ULTRA SPARC 1**
  - Processing Station Software **VIPS1.0.05 or higher.** VIPS1.0.05 or higher supports all sizes of SCSI disks, formatted in BSD format e.g. SUN HD  
**with ULTRA SPARC 1 and ULTRA SPARC 10.**

The installation of the PCI-SCSI board is not described in this document. Please refer to the document "PCI ULTRA SCSI HOST Adapter – Installation guide", delivered with the board.
- If the Processing Station has been delivered including external hard disks, the configuration is already done.  
The hard disk(s) just have to be connected.
- To get a workable system (with flexible user interface) for VIPS 1.0.05 or earlier, it is recommended to install not more than 9 GB of HDD size. Installation of more disk size causes problems like crashes of the autodelete function, disks which become completely full and crashes of the whole system, a non flexible user interface, a very slow system, ... The problem will be solved with VIPS1.0.06 or higher.
- Interface:
  - ULTRA SPARC 1: SCSI-BUS on controller 0
  - ULTRA SPARC 10: WIDE SCSI-BUS on PCI-SCSI board (upper connector)
- If a hard disk has to be disconnected in case of defect, this hard disk(s) must be de-installed by the "De-installation procedure" (see point 3 "De-Installation of a Hard Disk" page 7). **Otherwise the system will crash!!**



## 2. Installation Procedure

No.	Procedure Steps	Display / Comment
1.	<ul style="list-style-type: none"> <li>Switch on the Processing Station.</li> </ul>	The Processing Station boots and login prompt appears.
2.	<ul style="list-style-type: none"> <li>Login!</li> </ul>	 <p>controller button</p>
3.	<ul style="list-style-type: none"> <li>Click &lt;Controller&gt;</li> </ul>	 <p>Maintenance button</p>
4.	<ul style="list-style-type: none"> <li>Select &lt;Maintenance&gt; in the controller pull-down menu.</li> </ul>	<p>Maintenance password &gt; Maintenance Password ok. No match</p>
5.	<ul style="list-style-type: none"> <li>enter maintenance password and hit &lt;Return&gt;.</li> </ul>	<pre> 1 Connect    Connect via Telnet to a               network node 2 Install    Tools to setup DIPS/VIPS 3 Repair     Tools to repair               DIPS/VIPS 4 Tools      UNIX Tools 5 Help       Documentation about               (V)DIPS  Enter selection (// to exit) [?, ??, q] :</pre>

No	Procedure Steps	Display / Comment
6.	<ul style="list-style-type: none"> <li>Select:               <ul style="list-style-type: none"> <li>2 install and hit  <code>&lt;Return&gt;</code></li> <li>3 Hardware and hit  <code>&lt;Return&gt;</code></li> <li>1 Harddisk and hit  <code>&lt;Return&gt;</code></li> <li>1 ShowSCSI and hit  <code>&lt;Return&gt;</code></li> </ul> </li> </ul>	<p>A list of the used, reserved and free SCSI IDs is displayed.</p> <p>☛ <b>for ULTRA SPARC 1:</b> Look for the next free Image disk(s) and note the respective SCSI ID(s).</p> <p>☛ <b>for ULTRA SPARC 10:</b> if no external hard disk is connected, no list of SCSI ID's for the PCI-SCSI board is displayed.</p> <p>The following line appears: Enter selection:</p>
7.	<ul style="list-style-type: none"> <li>select               <ul style="list-style-type: none"> <li>2 DiskInstall and hit  <code>&lt;Return&gt;</code></li> </ul> </li> </ul>	<p>An instruction how to proceed is displayed.</p> <p>Then the following line appears: Are you ready to proceed with the installations:</p>
8.	<ul style="list-style-type: none"> <li>type y</li> </ul>	The Processing Station shuts down
9.	<ul style="list-style-type: none"> <li><b>switch off</b> all connected devices.</li> </ul>	
10.	<ul style="list-style-type: none"> <li>Connect the external hard disks</li> </ul>	<p><b>for ULTRA SPARC 1:</b> set the noted SCSI ID(s) on the hard disk(s) see step 6. The DAT tape should be the last device of the external SCSI BUS</p> <p><b>for ULTRA SPARC 10:</b> connect the external hard disk(s) to the upper connector of the PCI-SCSI board and set free SCSI IDs (highlighted) see table</p>

for ULTRA SPARC 1:		for ULTRA SPARC 10 (upper connector):	
Device	SCSI ID	Device	SCSI ID
1 <sup>st</sup> internal disk	0	1 <sup>st</sup> external disk - /images 10	0
2 <sup>nd</sup> internal disk	1	2 <sup>nd</sup> external disk - /images 11	1
1 <sup>st</sup> external disk - /images 2	2	3 <sup>rd</sup> external disk - /images 12	2
2 <sup>nd</sup> external disk - /images 3	3	4 <sup>th</sup> external disk - /images 13	3
4mm DAT-drive	4	5 <sup>th</sup> external disk - /images 14	4
3 <sup>rd</sup> external disk - /images 4	5	6 <sup>th</sup> external disk - /images 15	5
Internal CD-ROM	6	7 <sup>th</sup> external disk - /images 16	6
SCSI controller 0	7	PCI-SCSI controller board	7

No.	Procedure Steps	Display / Comment
11.	<ul style="list-style-type: none"> <li>Power on peripherals and Processing Station again !</li> </ul>	
12.	<ul style="list-style-type: none"> <li>Immediately when the monitor comes up press &lt;Stop&gt; and &lt;A&gt; - Key simultaneously to get the &lt;OK&gt; prompt.</li> </ul>	
13.	<ul style="list-style-type: none"> <li>type <code>probe-scsi-all</code></li> </ul>	<p>The following text is displayed:</p> <p>This command may hang the system when it tries to probe the SCSI-Bus. Then you have to switch off and on the Workstation by means of the power switch and try it once again. Please type reset-all to reset the system before executing this command.</p> <p>Then the following line appears:</p> <p>Do you wish to continue:</p>
14.	<ul style="list-style-type: none"> <li>type <code>y</code></li> </ul>	<p>The test will be performed and all connected SCSI – devices will be displayed like in the following examples.</p> <p>The examples may be different for different hardware configurations.</p>
15.	<ul style="list-style-type: none"> <li>Check the new added hard disk(s). If they are well connected, they should be in the listing of SCSI-IDs now (see table next page)</li> </ul>	<p>If the system hangs, switch off / on the (V)DIPS via the main switch and start again with step 11.</p>

**Example for ULTRA SPARC 1:**

```

ok probe-scsi-all
/iommu@f,e0000000/sbus@f,e0001000/espdma@f,400000/esp@f,800000
Target 1
  Unit 0      Disk      SEAGATE ST31200W SUN1.05872400472716
                        Copyright (c) 1994 Seagate
                        All rights reserved 0000

Target 2
  Unit 0      Disk      SEAGATE ST31200W SUN1.05872401455278
                        Copyright (c) 1994 Seagate
                        All rights reserved 0000

Target 3
  Unit 0      Disk      SEAGATE ST31200W SUN1.05872400812433
                        Copyright (c) 1994 Seagate
                        All rights reserved 0000

Target 4
  Unit 0      Removable Tape          Archive Python 24454-XXX24ASB

Target 6
  Unit 0      Removable Read Only Device  TOSHIBA XM-4101TASUNSLCD404/14
ok

```

**Example for ULTRA Sparc 10:**

```

ok probe-scsi-all
/pci@1f,0/pci@1/scsi@1,1
Target 1
  Unit 0      Disk      Quantum  SUN4.2G8619

Target 2
  Unit 0      Disk      Quantum  SUN4.2G8619
/pci@1f,0/pci@1/scsi@1
Target 4
  Unit 0      Removable Tape          Archive Python 24454-XXX24ASB
Ok

```

No.	Procedure Steps	Display / Comment
16.	• type <b>boot -r</b>	The system boots up and displays after a few minutes: Please log on as root and enter:/mimosa.install hit return to continue...
17.	• hit <b>&lt;Return&gt;</b>	DIPS console login:
18.	• type <b>root</b> and hit <b>&lt;Return&gt;</b>	Password: .....
19.	• type in the password	
20.	• # type <b>/mimosa.install</b>	OK to run with option init:
21.	• type <b>yes</b>	New disk detected on SCSI-Idx (x stands for set SCSI ID) Indicate the purpose of this disk (images/other)?
22.	• type <b>i</b> for images	Format and initialize the image disk?

No.	Procedure Steps	Display / Comment
23.	<ul style="list-style-type: none"><li>type <b>y</b></li></ul>	Step 22 / 23 repeat for every new Hard disk. The following window appears: OK to reboot:
24.	<ul style="list-style-type: none"><li>type <b>y</b>.</li></ul>	The Processing Station reboots and the UI starts.
25.	<ul style="list-style-type: none"><li>Check the complete installation of the added hard disk(s) via the Controller menu by selecting <b>&lt;System Monitoring&gt;</b> and <b>&lt;Disk&gt;</b> afterwards.</li></ul>	Installation done.



The number of the image partitions depends on the selected SCSI ID. Therefore the image partitions have not to be a continuous series of numbers.



### 3. De-Installation of a Hard Disk



#### When do you have to de-install a hard disk?

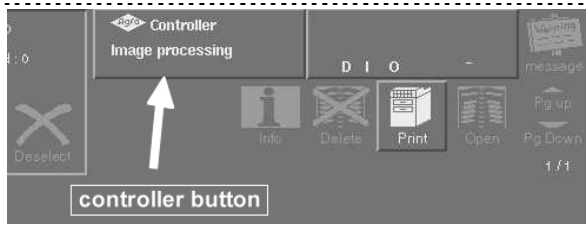
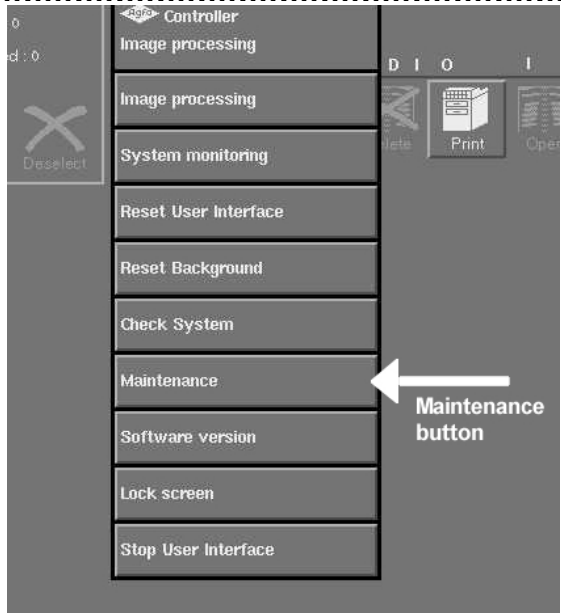
If an installed hard disk has to be disconnected

- due to a hardware defect
- because the hard disk is not needed anymore.

**A hard disk must not be disconnected without the de-installation procedure.  
This will crash the system !**



If a hard disk has been de-installed, the stored images are lost.

No.	Procedure Steps	Display / Comment
1.	<ul style="list-style-type: none"> <li>Switch on the Processing Station.</li> </ul>	The Processing Station boots and login prompt appears.
2.	<ul style="list-style-type: none"> <li>Login!</li> </ul>	
3.	<ul style="list-style-type: none"> <li>Click &lt;Controller&gt;</li> </ul>	
4.	<ul style="list-style-type: none"> <li>Select &lt;Maintenance&gt; in the controller pull-down menu.</li> </ul>	Maintenance password > Maintenance Password ok. No match
5.	<ul style="list-style-type: none"> <li>enter maintenance password and hit &lt;Return&gt;.</li> </ul>	<pre> 1 Connect   Connect via Telnet to a             network node 2 Install   Tools to setup DIPS/VIPS 3 Repair    Tools to repair             DIPS/VIPS 4 Tools     UNIX Tools 5 Help      Documentation about             (V)DIPS  Enter selection (// to exit) [?,??,q]:           </pre>

No	Procedure Steps	Display / Comment
6.	<ul style="list-style-type: none"> <li>Select: 2 install and hit                      &lt;Return&gt; 3 Hardware and hit                      &lt;Return&gt; 1 Harddisk and hit                      &lt;Return&gt; 3 DiskDeInstall and hit                      &lt;Return&gt;</li> </ul>	An instruction how to proceed is displayed. Then the following line appears: Are you ready to proceed with the deinstall:
7.	<ul style="list-style-type: none"> <li>type <b>yes</b></li> </ul>	A list of the current installed hard disks is displayed. Select disk to deinstall (//to end) :
8.	<ul style="list-style-type: none"> <li>Type the number of the disk to de-install</li> </ul>	<b>**Warning**</b> :All images on the disk will be inaccessible to MIMOSA. >OK to deinstall / images xy.
9.	<ul style="list-style-type: none"> <li>Type <b>yes</b></li> </ul>	>Wipe all the images from the disk?
10.	<ul style="list-style-type: none"> <li>Type <b>yes</b></li> </ul>	/Select disk to deinstall (// to end) :
11.	<ul style="list-style-type: none"> <li>Repeat Step 7 – 10 for further disks to de-install or type // to end the selection.</li> </ul>	Then the following line appears: Do you want to continue?:
12.	<ul style="list-style-type: none"> <li>type <b>yes</b></li> </ul>	The Processing Station shuts down
13.	<ul style="list-style-type: none"> <li>Switch off all connected devices when the Processing Station is shut down.</li> </ul>	
14.	<ul style="list-style-type: none"> <li>Disconnect the selected hard disk(s)</li> </ul>	
15.	<ul style="list-style-type: none"> <li>Power on the remaining peripherals and the Processing Station again !</li> </ul>	The Processing Station boots and the UI starts.
16.	<ul style="list-style-type: none"> <li>Check the de-installation of the hard disk(s) via the Controller menu by selecting &lt;<b>System Monitoring</b>&gt; and &lt;<b>Disk</b>&gt; afterwards.</li> </ul>	De-Installation done.

## Section 9

### 3.1

#### Description of Direct ID and Fast Preview

DD+DIS081.01E



Order-No.: DD+DIS081.01E



1 Piece ULP7H MA1

**ADC System Components**

Type 4406

**Description of Direct ID and Fast Preview****List of Contents**

<b>1</b>	<b>Prerequisites .....</b>	<b>1</b>
<b>2</b>	<b>Theory of Function .....</b>	<b>1</b>
<b>2.1</b>	<b>Fast Preview (Precheck).....</b>	<b>1</b>
<b>2.2</b>	<b>Direct ID (Dedicated configuration).....</b>	<b>2</b>
<b>2.3</b>	<b>Combination of Direct ID and Fast Preview.....</b>	<b>3</b>
<b>3</b>	<b>Configuration .....</b>	<b>3</b>
<b>3.1</b>	<b>Direct ID .....</b>	<b>3</b>
<b>3.2</b>	<b>Fast Preview .....</b>	<b>4</b>
3.2.1	Steps to configure the PRID_station (Default Settings) .....	4
3.2.2	Rerouting to another Preview Station (Changing Default Settings)....	6
3.2.3	Steps to configure the ADC Solo/Compact .....	7





## 1 Prerequisites

- Direct ID / Fast Preview (Precheck) are licensed options, which have to be purchased separately.
- Fast Preview function can be used with ADC Solo/Compact and a PRID Station.  
Direct ID function can be used with ADC Solo and a PRID-Station.
- Digitizer Software has to be at least version COP\_13xx, res. SOL\_12xx.
- PRID Software has to be at least version 1.2.07.
- 128 MB RAM must be installed on the PRID-Station to run the Fast Preview option.
- CCM tool version 1.1.04 or higher for the adaptation of the cpf-file.

## 2 Theory of Function

### 2.1 Fast Preview (Precheck)

It is useful to receive a preview image as fast as possible to decide if an x-ray has to be redone or not. A Fast Preview image is sent block by block (typical 100 lines) from the digitizer to one predefined PRID-Station while the IP is scanned. The Fast Preview image is reduced in size and is displayed as the pixels are coming from the digitizer. Because the image data is sent in DICOM format, the identification of the cassette has to be completed before or by Direct ID. The PRID-Station receives the Fast Preview image always with the complete ID data.

The preview module of the PRID prepares a display image that builds up on the monitor as scanning proceeds. The gray level representation improves from beginning to the end. With increasing completeness of bitmap and histogram the window and the gray level will automatically adapt.

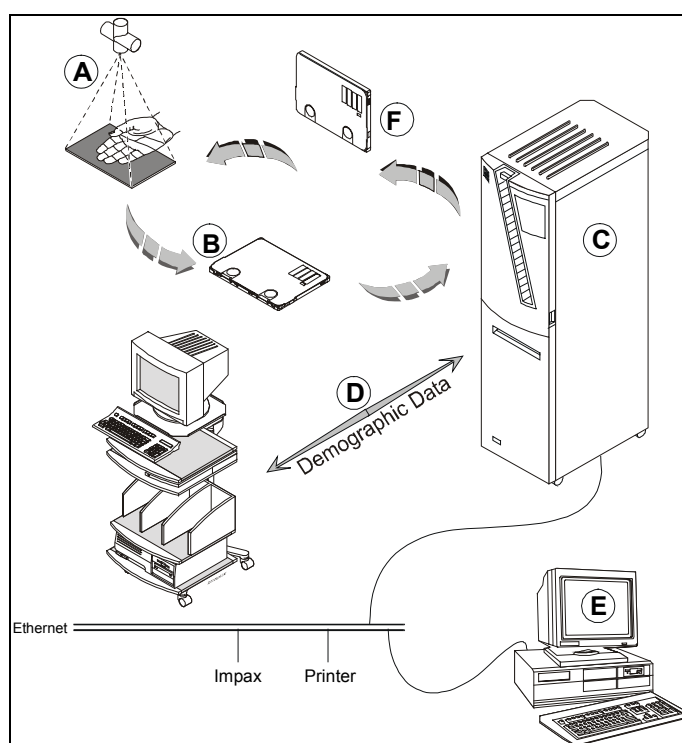
Parallel, the conventional preview image will be prepared. As soon as it is available from the Processing Station it will be sent to the PRID and replaces the Fast Preview image, even if it was not complete.

## 2.2

**Direct ID (Dedicated configuration)**

The dedicated configuration offers a time saving workflow (approximately one minute for a two cassettes study). If only one ID Station is dedicated to one ADC Solo, cassettes can be identified without using an ID-Tablet. This option is called Direct ID. The demographic data are transmitted from the ID Station to the digitizer via the network. This data flow makes it possible to scan an IP and simultaneously to enter the ID data.

- A speed class is selected on the ADC Solo by use of the emergency buttons. The sensitivity associated with the emergency buttons has been set during the configuration of the system.
- An exposed (A) but unidentified cassette (B) is inserted into the digitizer.
- By entering the cassette, the digitizer reads the remaining cassette information of the RF Tag and a communication channel to its dedicated ID Station is opened (D).
- The digitizer starts scanning the IP (C) and sends an ID Data Request message to the ID Station along. The ID Window pops up at the ID Station and the ID data have to be entered.
- After the user completed the information at the ID Station, it is sent back to the digitizer (D). The communication channel is closed afterwards.
- The transmission of the scanned image to the Processing Station and the Fast Preview image data is sent to the PRID-Station.
- Before the cassette is put out (F), the ID data on the RF Tag are erased and the cycle counter is increased by the ADC Solo.



Dealing with an emergency cassette the identification can be left out at all. Therefore, the user enforces the complete processing of the IP by pressing the Confirm Key at the digitizer. The digitizer emits an ID Cancel command to the ID Station, where the ID screen drops and the communication channel is closed. The digitizer completes its emergency cycle and the cycle counter is increased by the ADC Solo.



## 2.3

## Combination of Direct ID and Fast Preview

The features Direct ID and Fast Preview can also work in combination:

- A speed class by use of the emergency buttons is selected on the ADC Solo.
- An exposed but unidentified cassette is inserted into the digitizer.
- The digitizer starts scanning the IP and sends an ID Data Request message to the ID Station along. The ID Window pops up at the ID Station and the ID data will be entered.
- While the user is entering the data, the Fast Preview screen of the PRID is not visible. The transmission of the reduced Fast Preview image will be postponed until the ID data is completely inserted.
- The digitizer sends the image to the Processing Station and parallel the reduced Fast Preview image to the PRID. As soon as the calculation of the image is finished, the Processing Station sends the preview image to the PRID and replaces the Fast Preview.

## 3

## Configuration

### 3.1

## Direct ID



Make sure that the PRID-Station is switched on and obtainable from the digitizer.

- Call up the Service Menu of the Digitizer.
- Select <Configure>  
                        <Direct identification>
- Select an ID Station from the list, e.g. ID1.
- Make a new backup
- Activate the Direct ID license on the PRID – Station via the PRID license manager.
- Reset both, Digitizer and PRID-Station.
- Run a test:  
Insert a cassette into the digitizer, the ID window at the PRID-Station must pop up. Enter the ID-data while the IP is scanned.  
Check if the scanned image arrives at the Processing Station.



The IP-address of the digitizer is transferred to the PRID-Station at start-up. This IP-address is stored in the "directid.ini" on the PRID-Station.

## 3.2

## Fast Preview



By default the Fast Preview image is sent to the PRID –Station on which the cassette has been identified.

You can change the destination of the Fast Preview image via CCM.

## 3.2.1

## Steps to configure the PRID\_station (Default Settings)



The Preview function of the requested PRID-Station must be active:

- License switched on.
- Preview function configured in cpf-file.
- Install PRID 1.2.07 on the PRID-Station.
- Activate the Fast Preview (= Precheck) license via PRID license manager (the conventional Preview function must be activated as well).
- Configure the cpf-file via CCM-tool (min. CCM1.1.04):  
Select

<Application>

Application info overview

AE_title	hostname	IP address	port #	protocol	appl type	In use by
ADC_LR1	mg1	192.9.200.201	104	DICOM	HCP	hardcopy
ADCC1	adcc1	192.9.200.200	104	DICOM	COMPACT	digitizer
ADCS1	adcs1	192.9.200.199	104	DICOM	COMPACT	digitizer
ADVT_AS	adv1	192.9.200.150	104	DICOM	IMPAX	archive
ADVT_AS2	adv1	192.9.200.150	104	DICOM	IMPAX	archive
ADVT_HCP	adv1	192.9.200.150	104	DICOM	HCP	hardcopy
ADVT_HCP2	adv1	192.9.200.150	104	DICOM	HCP	hardcopy
IDEN1	prid1	192.9.200.203	3216	IDEN	IDEN1	ID-station
IDEN2	prid2	192.9.200.204	3216	IDEN	IDEN1	ID-station
IDEN3	prid3	192.9.200.205	3216	IDEN	IDEN1	ID-station
IDEN4	prid4	192.9.200.206	3216	IDEN	IDEN1	ID-station
PREC1	prid1	192.9.200.203	3729	PREC	PRECHECK1	
PREC2	prid2	192.9.200.204	3729	PREC	PRECHECK1	
PREV1	prid1	192.9.200.203	3035	PROP	PREV1	preview
PREV2	prid2	192.9.200.204	3035	PROP	PREV1	preview

12/20

EDIT ADD DEL Exit

- Click <Add> to add a Precheck Station.

Application type information

Do not enter an application type for the ADC70/MG and ADC70 ID-stations.

AE\_title: PREC1

Add IP Address: 192.9.200.203

Application type: PRECHECK1

Protocol: PREC

Port number: 3729

Host information overview

hostname: prid1

ip\_address: 192.9.200.203

subnet\_mask:

default\_router:

Used AE titles In use by

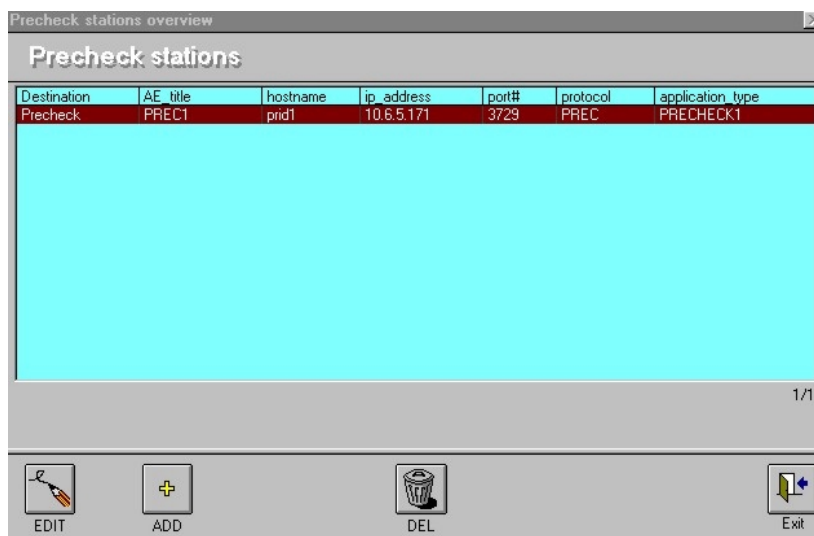
ADC_LR1	hardcopy
ADCC1	digitizer
ADCS1	digitizer
ADVT_AS	archive
ADVT_AS2	archive
ADVT_HCP	hardcopy
ADVT_HCP2	hardcopy
IDEN1	ID-station
IDEN2	ID-station
IDEN3	ID-station
IDEN4	ID-station
PREC1	
PREC2	
PREV1	preview
PREV2	preview
PREV3	preview
PREV4	preview
QS	workstation
SIMAS1	archive
vide	modulation

Record modified: ☒ Undo

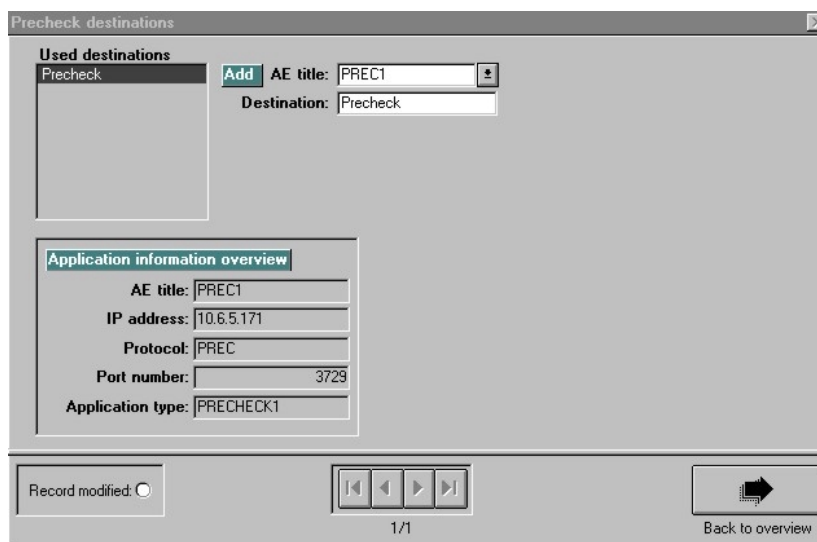
Back to overview

- Enter AE-title, IP-address and application type of the new Precheck Station.

- Select  
     <Devices>  
         <Precheck>



- Click <Add> to add a Precheck Station.



- Enter AE title and Destination of the new Precheck Station.



For a detailed description of the configuration via CCM tool, see section 6.2 of your Service Documentation ADC System Components.

- Save your settings.
- Load the modified cpf-file to all the components of the system.

### 3.2.2 Rerouting to another Preview Station (Changing Default Settings)

If you want to reroute the Precheck image to a Preview station other than the one on which the IP has been identified, you **additionally** have to configure this in the IDEN table.

- Select

<Devices>

<ID Station>

IDStationName	AE title	hostname	ip_address	port#	Precheck AE	protocol	application
IDEN1	IDEN1	pid1	192.9.200.203	3216		IDEN	IDEN1
IDEN2	IDEN2	pid2	192.9.200.204	3216		IDEN	IDEN1
IDEN3	IDEN3	pid3	192.9.200.205	3216		IDEN	IDEN1
IDEN4	IDEN4	pid4	192.9.200.206	3216		IDEN	IDEN1

- Select the ID Station you want to configure.
- Click <Edit>.

Used stationnames: IDEN1, IDEN2, IDEN3, IDEN4

Do not enter a ID-station for a ADC70 ID-station.

Add AE title: IDEN1  
ID Station: IDEN1

Application information overview

AE title: IDEN1  
IP address: 192.9.200.203  
Protocol: IDEN  
Port number: 3216  
Application type: IDEN1

Precheck of examinations identified on this ID-station will send to:  
Precheck: Precheck

Record modified: ☒ Undo

1/4

Back to overview

- Select from the field Precheck a Preview Station where the Precheck image should be sent to (one of the prechecks you have configured in the PREC-table).

## 3.2.3

## Steps to configure the ADC Solo/Compact

- Install SOL\_12xx / COP\_13xx on the ADC Solo / ADC Compact.
- Reset the Digitizer.



The Precheck function at the digitizer is disabled by default. It has to be enabled in the key operator menu.

- Enter the key operator menu of ADC Solo .



- Select <Precheck enable>.
- Reset the Digitizer.
- Run a test:  
Insert a cassette into the digitizer, the Fast Preview image must appear block by block on the screen of the defined Preview Station.  
As soon as the image is processed completely, the Fast Preview image must be replaced by the one coming from the Processing Station.

